Christopher R. Culpepper

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OBJECTIVE

To obtain a co-op position doing electronic hardware design or embedded software programming in the Spring of 2016 in order to further my education in the Computer Engineering field.

EXPERIENCE

Systems Engineering Co-op

July 2013 - Present

General Dynamics Advanced Information Systems, Pittsfield MA

- Performed software and systems testing on weapon control software.
- Managed requirements and test cases.
- Developed automated testing tracker that was used to status testing progress to management.
- Developed an application to measure and track ability code base sizes to assist with the peer review process.

Assembly Language Lab Teaching Assistant

January 2015 - Present

Computer Engineering Department, RIT, Rochester, NY

• Responsible for grading student reports and assisting students with ARM assembly language.

PROJECTS

High Altitude Balloon Telemetry Tracker

• Personally developed hardware and software design and implementation

- Developing radio board to have the ability to use FSK, AFSK, or audio-based protocols
- Utilized multiple PCBs in order to separate functionality and increase reusability
- Can communicate GPS and other sensor data to the Amateur Radio APRS network

Space Exploration Club High Altitude Balloon Data Logger

- Software Lead in charge of ensuring correct and well-functioning software
- Developed drivers and application code to log required data
- Ensured code was maintainable, easy to read and extensible

Freescale Car Cup Competition

- Worked with partners to create a line-following autonomous vehicle
- Required embedded programming, image processing and control theory

Assembly Language Pong Game

- Created a 1.5D Pong game for a school project in HCS12 assembly
- Required HCS12 assembly, PWM, ADC and digital output

AWARDS & **SKILLS**

Eagle Scout

A+ Certified

Languages & Software:

Visual Basic for Applications (VBA)

Python VHDL

AutoIt ARM & HCS12 Assembly

Microsoft Office DOORs IATEX Kicad

EDUCATION

Bachelor of Science, Computer Engineering GPA: 3.03

Rochester Institute of Technology, Rochester NY, Expected May 2017

Applied Programming Data Communication and Networks Computer Architecture Introduction to Software Engineering

Digital Signal Processing Digital System Design

Interface and Digital Electronics Assembly Language Programming

COMMUNITY SERVICE

Adult leader in Boy Scout Troop 88, North Adams, MA

- Assistant Scoutmaster
- Mentored Scouts to achieve rank and acquire valuable life skills
- Assisted with multiple community service projects

Radio communication at multiple road rallies

- Responsible for maintaining communication for racing stages and to central management
- Relayed pertinent information to competitors, stage captain and race officials
- Operated in a high-stress environment to prevent accidents and mistakes

EXTRA-**CURRICULAR** Amateur Radio Extra

Motorcycle and Automobile repair

Member of the K2GXT RIT Amateur Radio Club ACTIVITIES